SSA IT Guide to

CPIC | Capital Planning Investment Control

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1 INTRODUCTION

1.1 PURPOSE

The *Social Security Administration's (SSA's) Guide to Information Technology Capital Planning and Investment Control,* herein referred to as the Guide, defines SSA's Capital Planning and Investment Control (CPIC) process, giving staff members practical information to better understand SSA Information Technology (IT) planning and how the agency is meeting the Office of Management and Budget (OMB) requirements. This guide also serves as a framework within which SSA can formulate, justify, manage, and maintain a portfolio of IT Investments.

The Guide is issued in compliance with the Federal Information Technology Acquisition Reform Act (FITARA), the Clinger-Cohen Act, OMB Circular A-130, and OMB Circular A-11. In addition to Federal legislation and OMB directives, the following SSA issuances also drive and compliment IT Capital Planning:

- SSA Directive 8000.01 – formalizes the Chief Information Officer's (CIO) authority over all agency IT, including the SSA IT budget
- SSA Policy 8100.01 – requires the implementation of IT CPIC processes that effectively manage the selection, control, and evaluation of IT Investments, ensuring prioritization and sound management

See SSA Manual 8205.01 Federal Legislation and Requirements for a list of applicable guidance.

1.2 SCOPE

The Guide addresses requirements of the SSA IT Capital Planning process. The Guide will be updated, at a minimum annually, to include any new internal and/or external process changes. See the Issuance Library for SSA directives, policies, and manuals mentioned in the Guide.

2 TERMINOLOGY

For the purpose of consistency and clarity, the following terms and their meanings are applied to this Guide. For a complete glossary see SSA Manual 8200.01 Issuance Library Glossary.

Issuance: The action of supplying or distributing something, especially for official purposes. The action of formally making something known. SSA has four types of IT issuances: directives, policies, directive type memos, and manuals.

IT Investment: This term refers to the expenditure of IT resources to address mission delivery and management support. An IT Investment may include a project or projects for the development, modernization, enhancement, or maintenance of a single IT asset or group of IT assets with related functionality, and the subsequent operation of those assets in a production environment. All IT Investments should have a defined life cycle with start and end dates, with the end date representing the end of the currently estimated useful life of the Investment, consistent with the Investment's most current alternatives analysis, if applicable. When the asset(s) is essentially replaced by a new system or technology, the replacement should be reported as a new, distinct Investment, with its own defined life cycle information.

Project: This term refers to a temporary endeavor undertaken to accomplish a unique product or service with a defined start and end point and specific objectives that, when attained, signify completion. Projects can be undertaken for the development, modernization, enhancement, disposal, or maintenance of an IT asset. Projects are composed of activities.

When reporting project status, to the maximum extent practicable, agencies should detail the characteristics of "increments" under modular contracting as described in the Information Technology Management Reform Act of 1996 (ITMRA, also known as the "Clinger-Cohen Act") and the characteristics of "useful segments," as described in OMB Circular A-130.

Product: This term refers to a software technology and/or service that fills a need and delivers value to internal and external SSA customers while achieving agency goals and mission. Depending on the size and/or complexity of the product, product management methodologies require development through implementation of one or more projects. A project creates or enhances a product. A project is the 'how' and 'when' in product development while a product is the 'why' and 'what.'

3 Overview to IT Capital Planning

Each year SSA submits a budget request to OMB to justify its funding needs. Included in the budget request is a separate petition and justification for IT spend. OMB uses the data to:

- Inform their leadership of how SSA plans to spend the IT budget and to answer complex budget questions
- Initiate conversations to clarify inconsistence with Federal Information Technology Dashboard (IT Dashboard) and Chief Financial Officer (CFO) data
- Finalize budget recommendations and prepare congressional justification

Once the President approves the government budget, approximately in January, SSA resubmits the budget request consistent with the approved funds. The process for justifying and strategically managing the IT spend is called Capital Planning and Investment Control and consists of four phases.

The Guide will walk through each of the CPIC phases along with the factors that influence the process. For a detailed diagram of the process see Appendix A: SSA CPIC Process Flow.

3.1 Plan -> Select -> Control -> Evaluate

Capital Planning and Investment Control refers to a decision-making process that ensures IT Investments integrate strategic planning, budgeting, procurement, and management of IT in support of agency missions and business needs.[1] It consists of three phases: Select, Control, and Evaluate. SSA's process includes an additional phase: Plan. *Figure 1* below shows the CPIC process phases.

- **Plan.** The CPIC process begins with an idea, initiative, or legislation that requires IT resources to accomplish a mission. Once the business need and vision are clearly defined, a proposal is developed.
- **Select.** During the Select phase a formal proposal is created that includes justification for the business need, projected lifecycle costs, and an alternatives analysis with quantitative and qualitative results. The proposal is presented to the Information Technology Investment Review Board (IT IRB) for approval. The IT IRB selects IT Investments that best support SSA's mission. For investments that will be a Major IT Investment, the proposal is the foundation of the OMB business case that justifies the funding request.
- **Control.** Progress is tracked for all projects and investments against the planned results. Major IT Investments require monthly Earned Value Management (EVM), performance measures, contractor oversight/vendor

[1] FY 2021 IT Budget - Capital Planning Guidance

management, and risk reporting. This information feeds into the CIO rating and is used to populate the OMB IT Dashboard.

- **Evaluate.** Projects and investments are selected for Post-Implementation Reviews (PIRs) to determine if objectives were met and document areas of improvement that can influence Plan and Select. In addition, major investments complete an Operational Analysis to ensure that the investment is performing well enough to merit continued funding.

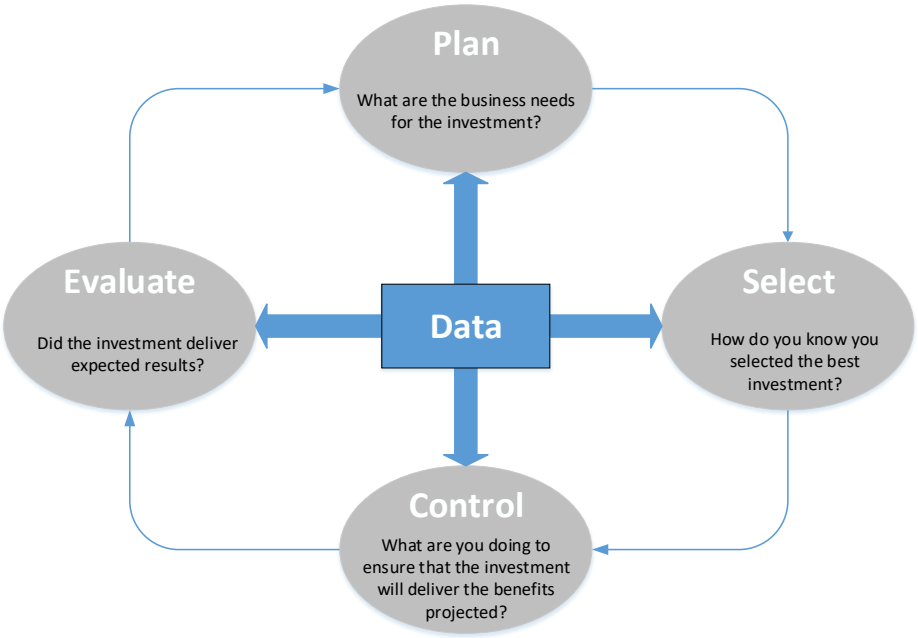


Figure 1 - CPIC Overview

4 Factors that Influence the CPIC Process

The political climate and current administration influence the CPIC process, using it as a means to accomplish their goals/objectives. As a result, SSA's mission and/or how the agency will achieve the mission shifts. Appendix A: SSA CPIC Process Flow depicts the key external drivers, how they intersect with SSA's mission, and subsequently impacts the CPIC process.

4.1 External Drivers

4.1.1 President's Management Agenda

The President's Management Agenda (PMA) is the President's strategy for improving the management and performance of the Federal government. Whether the PMA reinforces existing guidance or implements new strategies, SSA adjusts to the new priorities.

4.1.2 Legislation

The Administration continues to pass laws to enforce accountability and ensure proper management of government resources. One of the ways this is done is by grading CFO Act agencies' implementation of FITARA using the FITARA Scorecard. In order to meet the Administration's expectations and fulfill our responsibilities to the American public, SSA incorporates the legislative changes into its mission.

4.1.3 Executive Orders

The authority vested in the President by the Constitution allows him/her to issue executive orders that have the force of law, but do not have to be approved by Congress.[2] Executive orders are usually based on existing statutory powers and have been used to give additional impetus to the Clinger-Cohen Act and FITARA.

4.2 SSA's Mission

4.2.1 Commissioner's Priorities

Each Commissioner establishes objectives to achieve during his/her tenure. The objectives generally involve ways to improve the customer experience, reduce backlogs, and transform IT.

4.2.2 CIO's Priorities

As outlined in SSA Directive 8000.01, the CIO is responsible for all IT at the agency which encompasses major areas such as: (1) strategic planning, (2) planning, programming, and budgeting, (3) investment management, (4) information security, and (5) workforce. Oftentimes, the CIO elects to improve one of the five areas, to adopt a new technology that transforms the way SSA does business, to institute a new software development methodology, to implement critical legislation, or to provide strategic direction that will impact SSA's IT compass.

4.2.3 Agency Strategic Plan (ASP) /Agency Performance Plan (APP)

The ASP provides the general and long-term goals that SSA aims to achieve, the actions the agency will take to realize the goals, the strategies planned, how SSA will deal with challenges and risks that may hinder achieving results, and the approaches it will use to measure progress.[3] All proposals for IT Investments must align with a strategic goal and objective to be approved.

In the APP, SSA establishes current year and budget year performance goals, measures, and targets for the objectives outlined in the ASP. The APP is included as part of the agency's annual budget request to OMB.

4.2.4 Information Resource Management (IRM) Strategic Plan

The IRM Strategic Plan describes the overall information technology structure, recent accomplishments, and current and planned activities and enhancements. The IRM Strategic Plan describes the agency's forward-looking approach using IT resources to support its mission goals and objectives. Along with the ASP, following these documents helps to ensure that each IT dollar is invested in the most cost-effective way to improve SSA's service to the public and other customers.

4.2.5 Human Capital Operating Plan (HCOP)

The Human Capital Operating Plan provides a roadmap to address SSA's current and future human capital challenges and identifies specific, actionable initiatives to mitigate barriers to long-term workforce sustainability. The IT Addendum to the HCOP integrates the abilities and needs of SSA's IT workforce enterprise-wide and outlines specific near-term initiatives to address immediate challenges.

4.2.6 Information Security Policy (ISP)

The Information Security Policy serves as a protocol to protect, enable, assure, and secure SSA's IT resources and data. The Federal Information Security Modernization Act (FISMA) of 2014 requires the CIO, through the Commissioner, to

[2] Cornell Law School

[3] OMB Circular No. A-130

establish an agency-wide Information Security program and supporting policies. The ISP documents how SSA complies with FISMA, the National Institute of Standards and Technology (NIST), and other Federal regulatory requirements.

5 GOVERNANCE AND ENTERPRISE PROCESSES

5.1 EXTERNAL OVERSIGHT EXPECTATIONS AND GUIDANCE

Requirements defined in the Clinger-Cohen Act, FITARA, and related OMB and Government Accountability Office (GAO) guidance outline Federal agencies' responsibility to properly budget scarce resources, to align with agency goals, and to monitor those resources after they are allocated. OMB, GAO, and the SSA's Office of the Inspector General (OIG) address these responsibilities from different perspectives as described below.

5.1.1 Office of Management and Budget

OMB's Capital Programming Guide is intended to help agencies achieve disciplined capital programming processes. OMB's guidance for planning and budgeting begins with processes that aim to achieve tight integration between program performance objectives and planning, providing SSA with an opportunity to fulfill requirements and to develop and use Enterprise Architecture (EA) as a framework for logical requirements and capital asset planning. Individual activities include establishing a baseline plan, assessing options and alternatives, analyzing risks, and preparing acquisition baselines and strategies that support more effective management.

On an annual basis, OMB produces the IT Budget Capital Planning Guidance included in section 55 of OMB Circular A-11. The IT Budget Capital Planning Guidance outlines the requirements for all agencies that adhere to the Chief Financial Officers Act to report their IT budget and management information to the IT Dashboard. The IT budget and management information consists of three parts:

- Agency IT Portfolio Summary (AITPS)
- Major IT Business Case (MITBC)
- Standard Investment Report (SIR)

SSA uses the guidance provided by OMB to develop directives, polices, and procedures.

5.1.2 Government Accountability Office and SSA Inspector General

GAO and OIG provide an independent evaluation of how the Federal government spends taxpayer dollars. GAO's mission is to support Congress in meeting its constitutional responsibilities and to help improve the performance and ensure the accountability of the Federal government for the benefit of the American people. OIG has authority to inquire into all programs and IT activities and to conduct audits, inspections, and investigations. Audit findings and recommendations often factor into establishing the priority of various IT Investments that will address those recommendations or help to eliminate weaknesses found in SSA processes, services, or program management. SSA strives to incorporate the recommendations into its business process, not as a compliance exercise, but rather as means of increasing efficiencies and reducing waste.

5.1.3 Federal CIO Council

The U.S. CIO supports goals[4] of greater transparency, accountability, and citizen participation in Federal Government through the use of innovative IT strategies. The U.S. CIO works to ensure information security, protect individual privacy,

[4] CIO.gov

and save taxpayer dollars by creating a Federal Government that strategically, efficiently, and effectively uses IT to serve and protect U.S. citizens.

The U.S. CIO and the CIO Council establish standards against which the success of all agency programs can be measured, including:

- Monitoring the year-to-year performance improvement of Federal Government programs
- Attracting and retaining a high-performance IT workforce
- Optimizing Federal Government information resources and investments
- Aligning IT solutions with Federal enterprise business processes
- Adopting and sharing best IT management practices
- Managing risk and ensuring privacy and security

5.2 Internal Governance Structure

Enterprise IT governance provides the framework for the decision making and accountability required to ensure IT Investments efficiently and effectively meet agency strategic and business objectives. SSA has established a review process for executive oversight of its IT Investment planning, which includes the IT IRB and the Architecture Review Board (ARB).

5.2.1 Information Technology Investment Review Board

The IT IRB is an agency-wide executive board that governs the IT Investment management process. It provides a forum for deliberations about SSA IT and information resource investments needed to achieve the agency's mission needs and business requirements. The CIO chairs the IT IRB with the assistance of the CFO. The IT IRB governs the agency's IT Investment management process to focus on up-front investment planning, informed investment selection, transparent investment control, and relevant investment evaluation to provide the greatest benefit to the agency's mission.[5]

5.2.2 Architecture Review Board

SSA's ARB is part of a common approach to the practice of EA throughout the Executive Branch of the U.S. Federal Government. Federal law and policy require agency heads to develop and maintain an agency-wide EA that integrates strategic drivers, business requirements, and technology solutions. This includes principles for using EA to help agencies eliminate waste and duplication, increase shared services, close performance gaps, and promote engagement among government, industry, and citizens.

The ARB was established by the CIO to oversee, manage, and enforce compliance with the agency's EA, as well as to coordinate the efforts of the SSA IT community with respect to the maintenance and effectiveness of EA.

As part of the EA program, the ARB reviews, approves, and provides guidance to SSA IT projects and plans to ensure their alignment with the agency EA. The ARB also ensures ongoing agency EA alignment with the Federal Enterprise Architecture (FEA).[6]

The ARB relies on two additional governing boards to provide targeted recommendations and guidance from an application design and infrastructure perspective. The Design Review Board (DRB) provides technical support, guidance, and recommendations to the development community to ensure alignment with architectural standards, directives, and

[5] IT IRB Charter, SSA Policy 8020.01 Selection, Management, & Evaluation of Information Technology Investments

[6] SSA ARB Charter

guidelines. The Infrastructure Review Board (IRB) focuses on physical infrastructure and IT operations support, including capacity and performance management, and platform recommendations.

5.2.3 Division of Resource Management and Acquisition

The Division of Resource Management and Acquisition (DRMA) provides timely, standardized and objective market assessment reports using repeatable processes before budgets are approved. DRMA will review agency requirements, SSA owned software solutions, and utilize multiple third party consulting experts to produce objective cost analysis. They also provide recommendations to budget and an executive review board for consideration when making funding decisions.[7]

5.2.4 Office of Product and Project Management (OPPM)

The Office of Product and Project Management (OPPM) manages the agency's IT investments and encourages a more agile product-focused approach to emphasize customer value. With the formation of OPPM, the agency has shifted to using a Product Investment Approach to achieve the business goals of the agency. This approach solves customer problems and addresses customer needs, while creating efficiencies in IT development. A product is defined as the overall experience provided by a combination of capabilities that are created through a process, supported by data, and provides value to a customer in order to achieve agency goals. The shift to Product Management allows an agency to better react to changing customer and agency priorities, creating enterprise-wide agility, and to accomplish modernization across the enterprise.

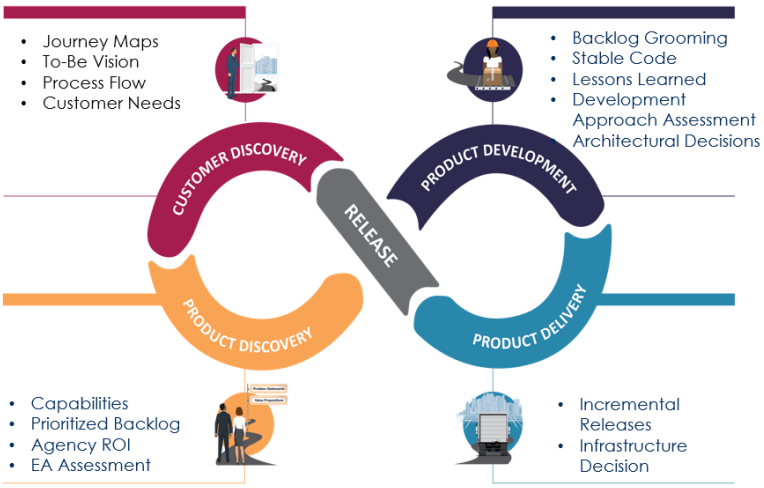


Figure 2 - Product Investment Approach

The software development organizations will continue delivering the investments. However, OPPM will manage the scope, schedule, and cost for those investments. OPPM personnel will also drive product strategy and operations and facilitate accessibility and user/customer experience. In addition, OPPM will define and maintain framework and governance standards for product/project management within the Office of Systems.

The Product approach incorporates the streamlined processes and a collaborative solution to governance, product/project management, and user/customer experience. OPPM provides the environment where support and software development teams can respond more quickly to changes, better embrace strategic initiatives, and expedite adoption of new technologies and methodologies.

5.3 Technology Business Management

5.3.1 Background

Technology Business Management (TBM) is an IT management framework that implements a standard IT spend taxonomy. TBM enables organizations to disaggregate IT spending into smaller, consistent categories to provide CIOs

[7] Policy DRMA ITCB, SSA Policy 8040.05 Software Solutions Analysis

and other C-suite executives with a more accurate and detailed understanding of their organization's IT costs. This allows CIOs to identify duplicative or unnecessary spending and to make better informed decisions regarding future investments.[8]

5.3.2 Benefits

The President's Management Agenda identifies Cross-Agency Priority (CAP) Goals to effect change and report progress in a manner the public can easily track. CAP Goal 10 "Improving Outcomes through Federal IT Spending Transparency" states that the Federal Government will adopt TBM government-wide by FY 2022 in order to improve IT spending data accountability and transparency. This goal will:

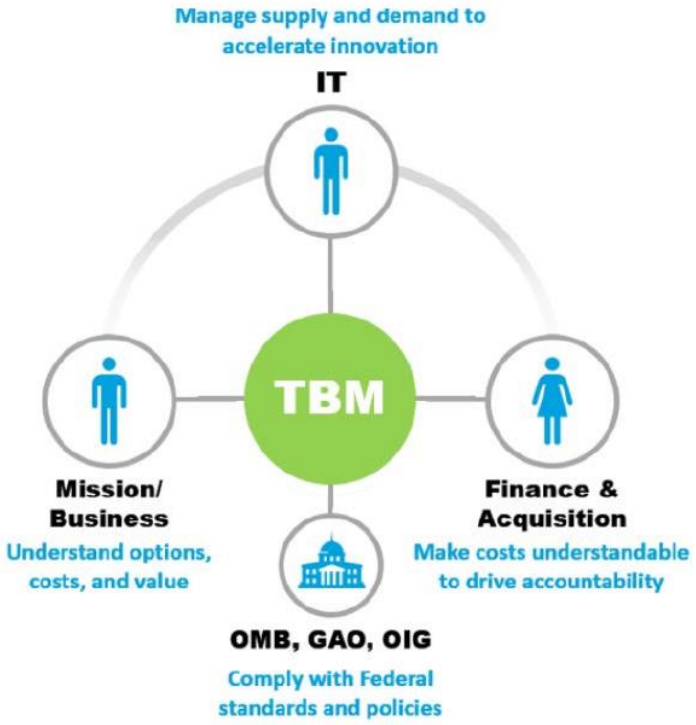


Figure 3 - Benefits of TBM

- Improve business, financial, and acquisition outcomes
- Enable Federal executives to make data-driven decisions and analyze trade-offs between cost, quality, and value of IT investments
- Reduce agency burden for reporting IT budget, spend, and performance data by automating the use of authoritative data sources
- Enable IT benchmarking across Federal Government agencies and with other public and private sector organizations[9]

In addition, TBM solidifies the partnership between the CIO, CFO, and the mission/business partners to provide the facts they need to collaborate on business aligned decision and capitalize on new opportunities. *Figure 3* illustrates the collaboration.

5.3.3 SSA Implementation

OMB is following an incremental process to roll out TBM, allowing SSA and other CFO Act agencies time to gradually adjust their business process leading up to full implementation in FY2022. For the FY2019 submission, SSA started with the most significant portion of the IT Budget by mapping the Infrastructure portfolio to the TBM IT towers. This pilot laid the foundation for mapping the remaining IT Budget to TBM IT towers. For the FY2020 submission, SSA reorganized all Infrastructure, IT Governance and Support, and Cybersecurity spending into TBM-aligned standard investments and mapped the entire IT portfolio to TBM IT towers in accordance with OMB guidance. In addition, the Office of Budget and the Office of Systems/Budget teams successfully aligned the Budget Object Codes/Sub-Object Codes to cost pools and sub-cost pools. To leverage industry best practices and lessons learned from the government early adopters, SSA participates in the Federal IT spending Transparency Community of Practice.

[8] CIO.gov

[9] President's Management Agenda

6 CPIC Roles and Responsibilities

6.1 Program and Project Managers

The Program Manager (PgM) and Project Managers (PMs) oversee the completion of the IT Investment. The PgM/PM also track the project plan against the baselines and furnish the updated cost, schedule, and performance information required to support CPIC decision making throughout the life cycle. Other responsibilities of the PgM/PM are as follows:

- Submit all reports in a timely manner
- Ensure all projects produce usable functionality at intervals of no more than 6 months as defined in the SSA Agile Policy and SSA Policy 8020.05 Certification of Incremental Development
- Obtain the Federal Acquisition Certification for Program and Project Managers (FAC-P/PM) to stay current with project management processes and understand acquisition practices
- Obtain senior level (level 3) FAC-P/PM certification to lead or manage major IT Investments.
- Follow the guidelines in the Office of Systems Project Management Guidebook

In addition, SSA is creating Project Management Offices (PMOs) to establish project management guidelines, provide assistance to the PgM/PMs and implement the Project Management Improvement Accountability Act (PMIAA).

6.2 Office of IT Financial Management & Support

The Office of IT Financial Management and Support (OITFMS) plays a key role in the execution of the CPIC process by:

- Ensuring the development of IT Investments that support the SSA strategic plan and its missions, goals, strategies, and priorities
- Ensuring agency and government-wide guidance and training are provided to assist PMs in their implementation and documentation of the IT CPIC processes
- Preparing and updating the Guide, detailing guidelines and procedures for implementing IT capital planning
- Performing IT Dashboard submissions and monitors investment health.
- Coordinating guidance to address the requirements of OMB Circular A-11, including the AITPS and MITBC
- Ensuring compliance with appropriate SSA issuances
- Developing and publishing IT plans, including the SSA IT strategic, capital, and operational plans
- Ensuring that the CPIC, EA, IT security, enterprise engineering, and program management processes are properly synchronized and linked
- Aligning funding with Full-Time Employee (FTE) and contractor support to execute work

7 OMB Submission

7.1 Investment Types

In order to obtain funding, the agency is required to submit its President's Budget AITPS to OMB each fall which includes IT Investments from all funding sources. SSA's AITPS consists of the following investment types:

- Major IT Investments
- Non-major IT Investments
- Standard Infrastructure Investments

- Funding Transfer Investments

7.1.1 Major IT Investments

Major IT Investments require special management[10] attention because it meets one of the criteria below:

- Designated by the SSA CIO as critical to the agency mission or to the administration of programs, finances, property, or other resources
- Has significant program or policy implications
- Has high executive visibility
- Contains high development, operating, or maintenance costs
- Provided by an unusual funding mechanism

The agency is required to submit Major IT Business Cases to OMB for all major IT Investments. The Major IT Business Cases describe the justification, planning, implementation, and operations of individual capital assets included in the agency IT Portfolio Summary and serve as key artifacts of the agency's EA and IT capital planning processes. The Major IT Business Case is comprised of two components:

1) The Major Business Case itself, which provides key high-level investment information to inform budget decisions, including general information and planning for resources such as staffing and personnel.
2) The regular information updates to the Major IT Business Case, which provides more temporal information related to tracking management of an investment, such as projects and activities, risks, and operational performance of the investment. This includes the CIO's responsibility to assess each Major IT Investment.[11]

7.1.2 Non-Major IT Investments

SSA is also required to submit Non-Major IT Investments. These are defined as IT Investments that do not meet the definition of “Major IT Investment,” “Standard Infrastructure,” or “Funding Transfer.”

A proposal/business case is required for Non-Major IT Investments when an investment is presented to the IT IRB.

7.1.3 Standard Infrastructure Investments

IT Infrastructure costs are broken into standard investments for Network, End User, Data Center and Cloud, Application, Delivery, Platform, IT Management, and IT Security and Compliance to align to the IT Tower level of the TBM taxonomy.

7.1.4 Funding Transfer Investments

Investments can also be categorized as “Funding Transfer Investments.” This investment type allows agencies to capture the portion of funding they provide toward another IT Investment. Funding Transfer Investments could provide funding for investments internal or external to the agency. The description of the IT Investment should indicate the Unique Investment Identifier of the managing partner investment.

7.2 OMB Timeline

Figure 4 outlines a notional schedule of the yearly OMB submission process. Output from the CPIC phases becomes input for the submission. This cycle begins with planning. Appendix B: SSA Timeline outlines SSA’s schedule to adhere to the OMB submission process.

[10] FY 2021 IT Budget - Capital Planning Guidance

[11] OMB Circular A-11 Section 55

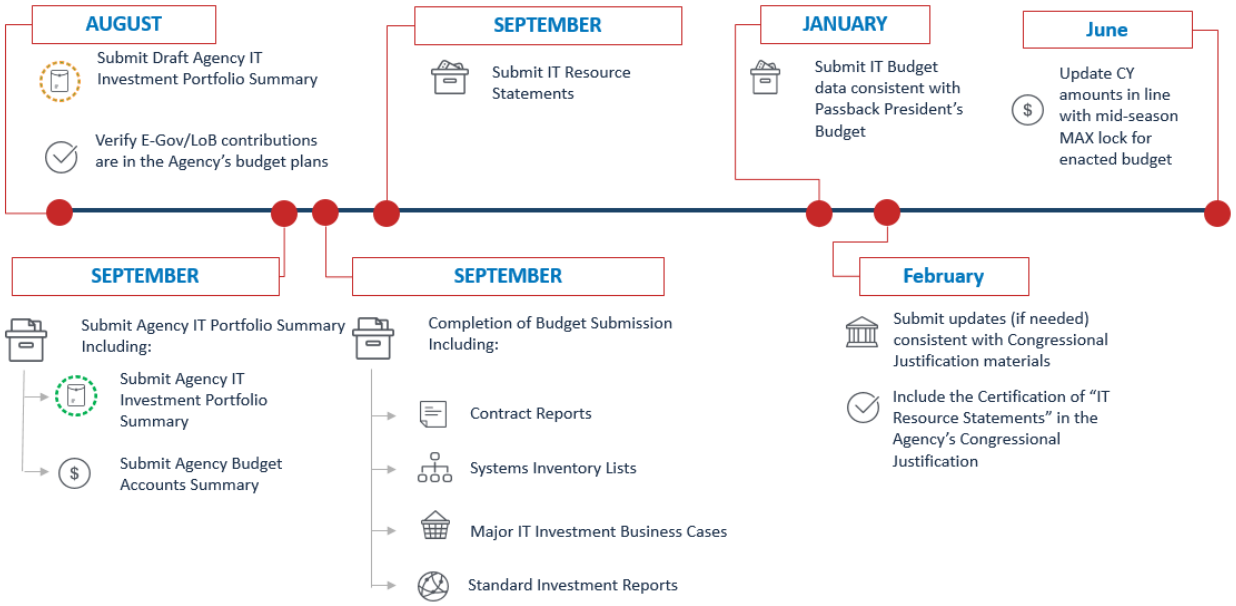


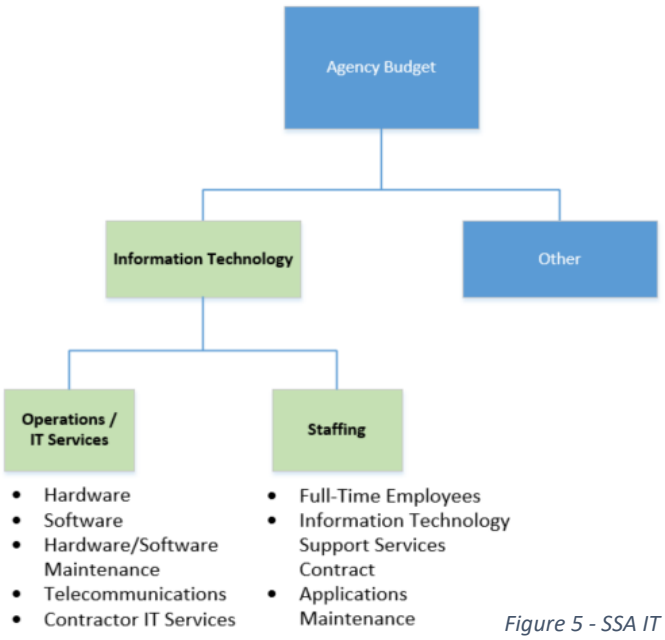
Figure 4 - Notional Submission Schedule

8 PLAN

8.1 PURPOSE OF THE PLAN PHASE

The Plan phase provides a process to assess proposed IT solutions for unmet requirements. It is during this phase that the business or funding need is identified and relationships to the agency strategic planning efforts are established.

8.2 SSA IT BUDGET STRUCTURE



SSA has a single IT budget that is managed by the CIO. It is divided into two parts and consists of funding for:

- Full-Time Employees and Contractors formulated into investment proposals for IT IRB approval
- Operational Expenses and Information Technology Services (ITS) that are formulated into funding requests for CIO approval

Figure 5 depicts SSA's IT budget structure. Both investment proposals and funding requests must align with the IT Guiding Principles.

Figure 5 - SSA IT Budget Structure

8.2.1 Investment Proposals

The Plan phase begins with the Business Sponsor identifying a business need. An analysis is performed to ensure that the business need harmonizes with the IT Investment Guiding Principles. Once OITFMS determines that the business need has merit, a check is performed to determine if:

(1) An IT solution already exists at the agency to satisfy the business need
(2) The proposed concept can be supported by the agency Infrastructure
(3) The proposed concept aligns with the agency IT strategy

After it is determined that the concept aligns with the agency's EA practices and architectural standards, the business need and proposed concept are articulated into the business case for an IT Investment. The Planning phase provides an opportunity to focus efforts and further the development of the initiative's concept. It allows project teams to begin the process of defining business requirements and associated system performance metrics, benefits, and costs, as well as subsequent completion of a business case and initial project planning efforts in preparation for inclusion in the agency's investment portfolio.

For a detailed explanation of the Plan phase and required artifacts, see the Information Technology Investment Management Process.

8.2.2 Funding Request

SSA's operational budget is used to provide IT equipment, software, hardware, network access, and IT security for the agency. Each year a control is issued to gather the ITS requirements from among the agency's offices. Components formulate their requirements into funding requests that include:

- Identification and alignment with related or dependent investments
- Comprehensive narrative with an issue statement, proposed strategy, costs, alternatives considered, Return on Investment (ROI), security compliance and costs, funding impact and dependencies, and supporting documentation
- Procurement details for the Advanced Procurement Plan and Procurement Requisition

8.3 Plan Phase Key Outputs and Outcomes

The key outputs of the Plan phase are new investment proposals/funding requests that are complete, thorough, and meet the minimum requirements to be effectively evaluated during the Select phase.

The key outcome of the Plan phase is improved quality of investment proposals/funding requests through the implementation of standard components and requirements.

Business needs that do not align with the IT Investment Guiding Principles or EA practices and architectural standards do not proceed to the Select phase.

9 Select Phase

9.1 Purpose of the Select Phase

The purpose of the Select phase is to assess the costs and benefits of all proposed investments/funding requests and to select the optimal portfolio of IT Investments. The Select phase focuses on the development and selection of an IT portfolio that supports the agency's EA and meets the agency's mission and strategic goals. Individual investments are

evaluated in terms of technical alignment with other IT systems and other cost, schedule, performance, benefit and risk criteria. Investments are also reviewed to evaluate whether there is a potential duplication of an initiative or existing agency system application. In this phase, IT initiatives are reviewed and prioritized to inform decisions about which investments/funding request will be financed in the coming year.

The Select process is supported and implemented through the agency's IT governance program and requires the participation and collaboration of all IT PgM/PMs with OITFMS, the CIO, the CFO, and executive-level decision-making bodies. Within the agency, the Select process is closely tied to the budget process, and therefore, the CIO and CFO are an integral part of the Select phase.

9.1.1 Investment Selection

During the Select phase final proposals are sent to the IT IRB for a ruling[12]. IT Investments are selected for portfolios based on defined selection criteria consistent with the requirements of OMB A-11 and A-130, and SSA Policy 8020.01 Selection, Management, and Evaluation of IT Investments. Approved investments are then prepared for prioritization.

9.1.2 Funding Request Review

Each component's funding request is reviewed. Analysis incudes the assessment of need, appropriateness, reasonableness, and alignment with the IT Investment Guiding Principles.

The funding requests may be referred to various offices for review and consideration. Technical and procurement experts may also provide an assessment to ensure that requested items are a viable technical solution. Feasible requests are mapped to the TBM IT Towers and prepared for prioritization.

9.1.3 Prioritization

The goal of prioritization is to rank the agency's IT Investments according to priorities. During prioritization, the agency's senior leadership review the requests for both new and inflight investments to determine the amount of IT resources that will be allocated for FTEs, contractors, and funding requests. The analysis takes into account the relative operational, technical, financial, and institutional strengths and weaknesses of each initiative. The agency's objective is to maintain a balanced IT Investment portfolio that ensures, for any given funding investment, the best return to the agency's mission and functions.

Based on the results of prioritization and the final IT planned budget outlined in the IT Capital Plan, Program Teams and OITFMS are asked to revise their respective budgets, business cases, IT portfolios, and funding requests. Once the required revisions to the IT business cases and portfolios are made, the draft consolidated agency IT portfolio is presented by the CIO for final approval.

9.1.4 IT Resource Statement

The IT Resource Statement is a requirement from OMB Circular A-11, Sections 51.3 and 55.6, and the OMB IT Budget – IT Capital Planning Guidance. The CIO, in consideration of the agency's budget submissions, provides the common baseline rating demonstrating the level of CFO/CIO collaboration required to fully implement FITARA.

In order to sign-off on the IT Resource Statement, both the CIO and CFO review the IT Budget Summary Tables that outline the IT budget request by funding type within portfolios and investment categories.

The IT Resource Statement must be posted to the OMB MAX Portal twice, once during the official IT Portfolio Submission, and once during Passback for the Final President's Budget.

[12] See the IT IRB Charter for more details.

9.1.5 OMB Budget Submission

The next step of the Select process is preparing the overall AITPS, including major, non-major, standard, non-standard, and funding transfer IT Investments for submission to OMB. The final AITPS is submitted to OMB for budget review in September of each fiscal year in accordance with OMB A-11 guidance. The MITBCs and SIRs are required documentation for OMB that are used to justify funding major IT Investments. OITFMS offers training and guidance for major and standard investments and issues data calls for draft and final submission of the MITBCs and SIRs to OMB.

9.2 Select Phase Key Outputs and Outcomes

The key outputs of the Select phase include:

- A prioritized portfolio of IT Investments that are approved for funding in the upcoming Budget Year
- A budget for the above portfolio that has been reviewed and concurred by the agency's CIO and CFO

The key outcomes of implementing Select phase include:

- Improved justification of the IT portfolio through standard, published criteria
- Increased coordination between the agency's budget and IT CPIC processes
- Improved management oversight and review over the IT portfolio

10 Control Phase

10.1 Purpose of The Control Phase

The purpose of the Control phase is to ensure, through timely oversight, quality control, and executive review, that IT initiatives are conducted in a disciplined, well-managed, and consistent manner within the agency. This process enables the effective management of the agency's IT Investments. The Control phase sets in place a structured process to provide senior managers with accurate information that will allow them to make timely decisions.

The Control phase will include a review of EVM data where applicable, and performance management data for investments not subject to EVM requirements. IT Investments not performing according to expectations are subject to additional detailed reviews, managerial corrective actions, and/or termination. In addition, all investments must report on project management qualification requirements as required by the FAC-P/PM guidance. This review assesses the qualifications of PgMs/PMs for capability of project management performance of Major IT Investments, ensuring compliance with both external and internal regulations and guidance.

10.2 Overview of the Control Phase

The Control phase begins after investments/funding requests have been selected, budgeted, and funding has been received. The Control phase of the agency's IT CPIC process requires monitoring of ongoing IT initiatives during the planning, acquisition, deployment, maintenance, and operational phases of the IT Investment lifecycle. The primary objective of the Control phase is to assess the performance of investments and enable the effective management of all Major IT Investments.

The ability to adequately monitor IT initiatives relies heavily upon outputs from effective investment execution and management activities. The agency has made significant strides in controlling its IT Investments by establishing review processes. The review processes include the Milestone Reviews, Operational Analysis, CIO Ratings, TechStat Reviews, IT Dashboard Reporting, Risk Management, Quarterly Health Reporting, CIO PM Engagement, and Funding Assessments.

All Major IT Investments are reviewed in the areas of project management qualification, cost and schedule variance, and performance goals. “Passing” scores have been defined for each performance area.

10.2.1 Milestone Reviews

The PM is responsible for establishing realistic project management and execution plans, procedures, and practices to support initiative-monitoring activities. The PM is also required to report to the CIO on the status of the initiative’s cost, schedule, and technical baselines each quarter. Baselines provide the framework and sufficient detail to assess the status of the initiative’s major milestones, decisions, activities, work products, and deliverables.

10.2.2 Earned Value Management (EVM)

The OMB requirements for appropriate project control include the implementation of an EVM system that meets the American National Standards Institute/Electronic Industries Alliance-748 Standard. EVM provides an indication of how well an investment is meeting the cost and schedule goals defined prior to the outset of the investment. The determination of earned value begins with an estimate of the costs and schedule dates associated with completing investment work packages. Earned value is an assessment of the dollar value of the work actually accomplished based on the original cost estimates to complete the work. The earned value is compared to the planned value (which comprises the original cost and schedule estimates) and actual costs and completion dates to determine schedule and cost variances, respectively. The three major objectives of employing earned value are to provide:

- An effective internal cost and schedule management tool for use by PMs
- Senior Management and governance boards, with a mechanism for evaluating initiative progress
- A means to identify potential problems throughout the lifecycle in time to implement changes or corrective actions to ensure project objectives are met

10.2.3 TechStat Reviews

While there are regular reviews of IT Investments, there are also ad-hoc reviews that occur on IT Investment data. One such ad-hoc review is the TechStat review.

Building on the foundation of the IT Dashboard, OMB launched the TechStat Review, which is an evidence-based, data-driven review of an IT Investment via face-to-face accountability sessions with investment stakeholders, agency leadership, and OMB. The intent of the TechStat Review is to gain a shared understanding of the objectives of the investment and understand the risks associated with continued investment. Investments are selected based on cost, schedule, performance data, and CIO evaluations reported on the IT Dashboard. The investments are analyzed with a focus on problem-solving that leads to concrete action to improve performance. TechStat Reviews enable the agency to turnaround, halt, or terminate non-performing IT Investments. Once the TechStat is complete, the IT Dashboard CIO evaluation is updated.

10.2.4 IT Dashboard Reporting

OMB requires that the agency submit all IT portfolio and investment data to the IT Dashboard. The IT Dashboard is a website enabling Federal agencies, industry, and the general public to view details of Federal IT Investments, providing transparency on the effectiveness of government IT programs. The IT Dashboard provides access to individual Major IT Investments, including projects and activities associated with an investment (reported regularly) and the agency’s IT Portfolio (reported annually).

All Major IT Investments should be maintained on the IT Dashboard to reflect the most current information available for performance metrics, risks, projects, and/or activities[13]. Regular IT Dashboard reporting includes a review of project cost and schedule variances, performance metrics, project and operational risks, and CIO Evaluation.

10.2.5 Risk Management

PMs also develop risk strategies to address problems or issues related to their investments. The resolutions of all issues are documented and mitigation actions tracked. A mitigation action to resolve deficiencies depends on the extent of change that would be required to the initiative's overall project plan, considering the cost (in terms of dollars and/or time) to make the change and the calculated severity of the deficiency.

10.2.6 CIO PM Engagement

The CIO meets with the Major IT Investment PgMs each quarter. During the session the PgM reports the investment's status as published on the IT Dashboard, explains any variances or statuses that are red or yellow, addresses pertinent risks, and proposes a CIO Rating/Comment. This engagement allows the CIO to have a pulse on each investment and provide recommendations/assistance where necessary. In addition, it prepares the CIO to:

1. Update the CIO Rating/Comment on the IT Dashboard, if necessary
2. Discuss the status of the Major IT Investments at the quarterly health meeting

10.2.7 CIO Evaluation

CIOs are required to assess the current level of risk for the investment in terms of its ability to accomplish its goals.[14] The rating is informed by the following factors:

- Performance
- Risk Management
- Requirements Management
- Human Capital
- Incremental Development

In order to assist the CIO with the Rating/Comment, the PgMs and PMs perform a self-assessment of their projects. The project ratings are rolled up to an investment level. At the quarterly PgM engagement meeting, the PgMs report their recommended CIO Rating/Comment, along with justification. The CIO makes the final decision and publishes the comments/rating to the IT Dashboard.[15]

10.2.8 Quarterly Health Reporting

The CIO reports on the health of the IT portfolio to the Commissioner and executive sponsors on a quarterly basis . The quarterly health meeting sets in place a structured process to provide senior management with decision-making information and to meet the goals and objectives that were established in the business cases submitted to OMB as part of the budget submission process. The agenda typically involves a discussion on the IT budget spend, incremental development, health assessment indicators, Major IT Investment health, and Non-Major IT Investment health.

The principal objectives of the quarterly health review include:

[13] FY 2021 IT Budget - Capital Planning Guidance

[14] FY 2021 IT Budget - Capital Planning Guidance

[15] SSA Policy 8020.05 Certification of Incremental Development

- Determining whether investments under review continue to support mission and business functions
- Assessing the extent to which investments continue to meet planned cost, schedule, and technical baselines
- Identifying deficiencies and track the completion of corrective actions
- Certifying incremental development. For additional details see SSA Policy 8020.05 Certification of Incremental Development

10.2.9 Portfolio Quality Review

SSA's investments are organized into five portfolios: IT Modernization, Infrastructure, Administrative Applications, Programmatic Applications, and Cybersecurity. These portfolios undergo an integrity check to ensure that they are compliant with SSA's IT Investment management policies and procedures.

10.2.10 PortfolioStat

PortfolioStat refers to a face-to-face, evidence-based review of an agency's IT portfolio. Reviews can be used to identify and address a broad range of issues, including management of commodity IT, duplication of Investments, and alignment with the agency's mission and strategy[16]. It is a FITARA requirement that SSA's CIO along with other executives, conduct the annual review of the IT portfolio with OMB. To the extent practical, the annual IT portfolio reviews required by FITARA are coordinated with the portfolio review requirements of the PMIAA and integrated into SSA's internal review processes in preparing materials for the annual Strategic Review meeting with OMB each spring[17].

10.3 Control Phase Key Outputs and Outcomes

The key outputs of the control phase include:

- Regular investment updates to the IT Dashboard
- Quarterly health assessment

The key outcomes of the control phase include improved oversight and management over the IT portfolio. Successful implementation of control phase processes will:

- Improve the identification of poorly performing projects
- Decrease time to correct poorly performing projects
- Improve investment risk management

11 Evaluate Phase

11.1 Purpose of the Evaluate Phase

The purpose of the Evaluate phase is to examine whether an IT Investment has met its intended objectives and yielded expected benefits as projected in the business case. The Evaluate phase 'closes the loop' of the IT Investment management process by comparing actual against estimates in order to assess the performance and identify areas where decision-making can be improved.[18]

[16] FY 2021 IT Budget - Capital Planning Guidance

[17] OMB Circular A-11

[18] GAO's Assessing Risks and Returns: A Guide for Evaluating Federal Agencies' IT Investment Decision-Making

11.2 Overview of the Evaluate Phase

The Evaluate phase includes an Operational Analysis, Post-Implementation Review (PIR) on implemented or cancelled investments, Project Close Out, as well as an assessment of IT CPIC processes. These activities are essential to the contributions that IT Investments make toward the accomplishment of the agency's strategic goals and objectives.

11.3 Operational Analysis

Operational Analysis is a method of examining the current and historical performance of the operations and maintenance (steady state) investments and measuring that performance against an established set of cost, schedule, and performance parameters. An Operational Analysis is, by nature, less structured than performance reporting methods (EVM) applied to developmental projects. Operational Analysis is more subjective in nature, should trigger considerations of how to better meet objectives, save costs, provide alternative methods of achieving the same results, and determine whether a particular function should be performed.

Steady State Investments complete an Operational Analysis annually in the place of an Alternatives Analysis and monthly EVM processing. Mixed life-cycle investments may complete an Operational Analysis annually, in addition to an Alternatives Analysis and monthly EVM, if a significant portion of the investment is Steady State.

In addition to the developmental performance measures of "Are we on schedule?" and "Are we within budget?" an Operational Analysis answers more subjective questions in the specific areas of:

- Customer Satisfaction
- Strategic and Business Results
- Financial Performance
- Innovation

Operational Analysis will lose much of its value-added benefits to the capital programming process if an opportunity to make a course correction is missed due to inattention to early warning indicators. Analysis of such indicators may show a need to apply an improvement methodology, such as value management, to identify if there are better ways for the asset to meet its life-cycle cost and performance goals. Operational indicators for a given asset may include any of the following: effectiveness, energy usage, efficiency, reliability, productivity, maintainability, availability, and security.

11.4 Project Closeout

As defined in SSA's Office of Systems Project Management Guidebook, the goal of the Project Closeout phase is to conduct closeout activities at the project level. This phase begins after all release activities have finished and includes:

- Evaluating the outcome of the project against the Project Scope Management Agreement
- Ensuring that any lessons learned are shared
- Releasing resources used by the project
- Reviewing benefits achieved at the end of the project
- Conducting PIR activities, if required

11.5 POST IMPLEMENTATION REVIEWS

A PIR is performed on IT systems 6 to 18 months after they are fully deployed. This review is important not only to determine the future viability of the IT Investment[19], but also to assist IT managers in improving IT proposal business case requirements to better inform future IT selection decision-making. The PIR, in essence, closes the loop with regard to the IT CPIC process by facilitating feedback on an investment's overall processes and its refinement. The need to evaluate an investment's ability to effectively meet the requirements of the agency's mission, both functionally and economically, does not end at investment deployment. Rather, it is a continuous process to ensure that the investment still supports both the users and mission's needs.

The purpose of an investment PIR is to track and measure the impact and outcomes of implemented or cancelled IT Investments to ensure they meet the program mission and/or obtain lessons learned. Applicable questions include:

- Did the delivered product meet the specified requirements and goals of the project?
- Was the user/client satisfied with the end product?
- Were cost budgets met?
- Was the schedule met?
- Were risks identified and mitigated?
- What could be done to improve the processes?

A PIR is typically conducted on implemented investments to evaluate the actual results compared to estimates/expectations in terms of cost, schedule, performance and mission outcomes/strategic performance, determine the causes of major differences between planned and end results, and to help improve project management practices.

As part of the PIR process, a template[20] and scoring criteria are provided in the Post-Implementation Review Guide so that OITFMS can implement a standard process when conducting its PIRs. Applying the same evaluation criteria ensures consistent scoring across the agency. The PgMs/PMs should complete the template along with their proposed assessment of their investment's performance. The template contains much of the same information as that for the IT Dashboard and provides a continuity of evaluation from the Select to the Evaluate phases.

To complete a PIR, comprehensive investment information must be gathered, analyzed and documented in a PIR Summary and Recommendations Report. Although the same factors will be used to assess all investments, the specific information that the investment is required to report may vary. Detailed requirements and the criteria by which the investment will be assessed for each type of review will be determined by OITFMS.

The PIR should include a lessons learned document. Lessons learned enable the knowledge gained from past experience to be applied to current and future investments to avoid the repetition of past failures and mishaps. Lessons learned documentation can represent both positive and negative experiences. The ability of the PM to more effectively manage an investment is greatly increased through this resource. Further, a review of lessons learned from prior investments will help identify problems that may materialize during the investment. Analysis of these problems should lead to ways to avoid or mitigate them. Reviewing lessons learned helps to set a realistic schedule, estimate accurate costs, identify possible risks/mitigation strategies, and feeds the continuous improvement process.

[19] SSA performs PIRs projects once they are complete. In addition, SSA conducts PIRs on investments for a more holistic approach.

[20] SSA Post Implementation Review Framework and Procedures Guide

11.6 Assessment of The IT CPIC Process

The Evaluate phase includes an assessment of the IT CPIC process to ensure that the desired outcomes for IT Investment Management are achieved. Using the collective results of annual IT CPIC evaluation assessments and PIRs, SSA is able to identify potential modifications to the IT CPIC Plan, Select, Control, and Evaluate processes based on lessons learned. Such an assessment provides insight into the strengths and weaknesses of the processes and procedures performed in the IT CPIC phases. As a result, improvement recommendations are developed, and the IT CPIC processes are updated as needed.

11.7 Evaluate Phase Key Outputs and Outcomes

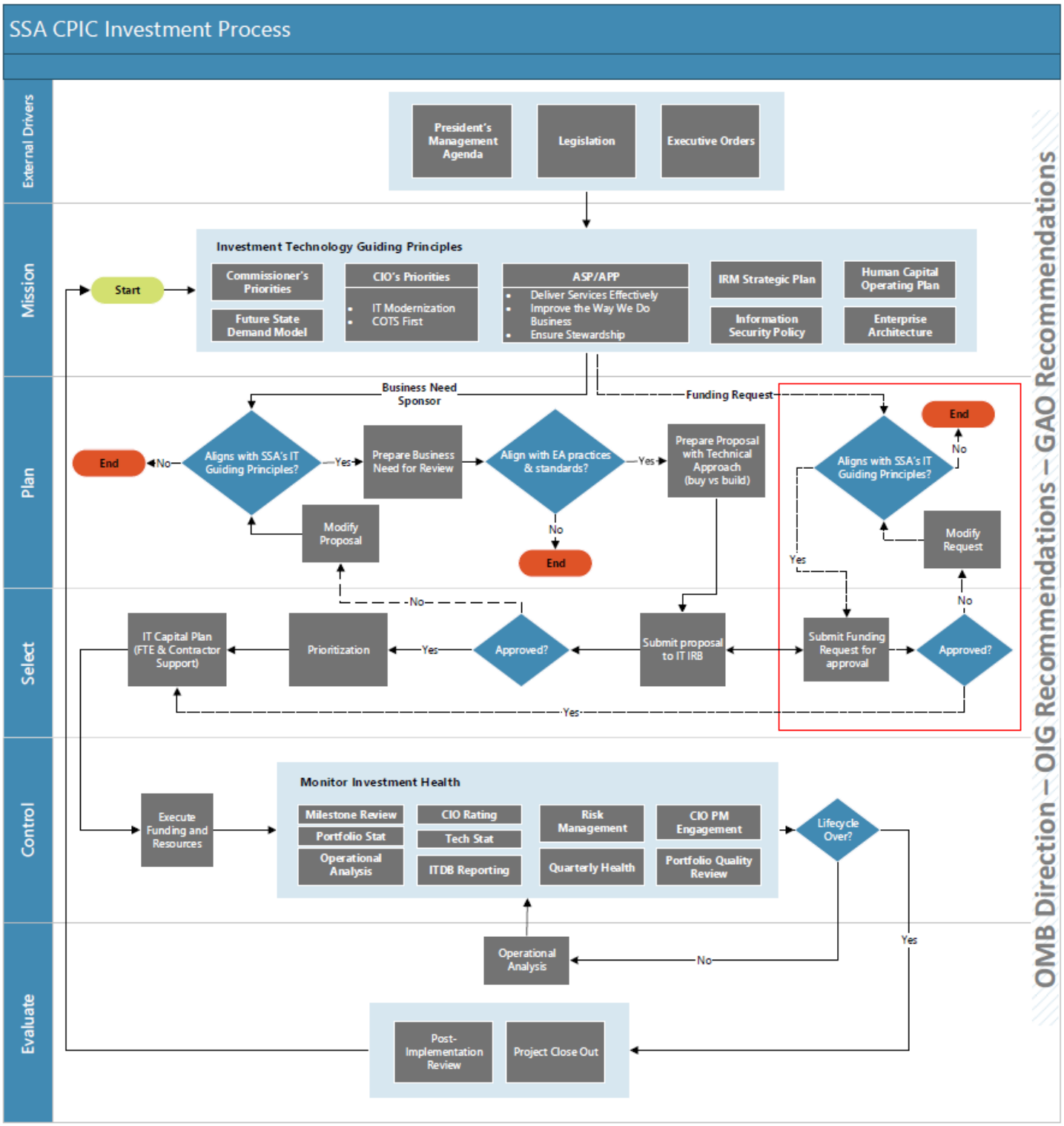
The key outputs of the Evaluate phase are:

- A completed Operational Analysis for active systems
- A completed PIR for recently completed investments
- Improvement recommendations for the agency's overall IT CPIC process

The key outcomes of implementing Evaluate phase processes are:

- Greater accountability in meeting goals and expectations
- Improved insight into areas of the IT portfolio requiring future investment
- Increased maturity in the agency's IT CPIC process

APPENDIX A: SSA CPIC PROCESS FLOW



APPENDIX B: SSA TIMELINE

Tasks	Dates*
Regular Major and Standard Investment IT Dashboard updates	Monthly
Prioritization	Annually
IT IRB investment decision session	Monthly
Develop investment proposals	Ongoing
Draft of AITPS due to OMB	August
IT Budget submission to OMB	September
Passback	January
* The timeline is subject to change as it is mapped to annual OMB guidance.	

DOCUMENT CHANGE RECORD

Version	Date	Description of Change
1.0	04/2012	First release
2.0	10/2013	2013 Annual Revision
3.0	11/2014	2014 Annual Revision
4.0	02/2016	2015 Annual Revision
4.5	09/2017	2017 Annual Revision; Updated changes related to immediate responses to GAO audit, SITAR, PEB, IT IRB and critical priorities.
4.6	05/2018	Updated to reflect acquisition plan and requisition approval processes changes.
5.0	09/20/2018	Created new SSA IT Guide to Capital Planning and Investment Control that incorporates related CPIC issuances.
6.0	9/24/2019	2019 Annual Revision; Included references to new issuances